Dr. John L. Morrison

Significant contributions in the fields of electronics and signal processing.

Phone: 406.496.4515
E-mail: jmorrison@mtech.edu

Education: John L. Morrison earned his Ph.D. in Electrical Engineering at the University of Idaho. He earned his Master's and Bachelor's Degrees in Electrical Engineering from the University of Connecticut.

Licensing information

For information on licensing INL technologies such as those developed by Dr. Morrison, contact the Lead Account Executive for Nuclear Science and Technology:

John Snyder
Phone: 208.526.9812
E-mail: john.snyder@inl.gov

Work Experience: Dr. Morrison started his professional career at Naval Reactors Facility (NRF) in the nuclear power training program. He qualified on the prototype reactor S1W. In 1975, he worked for the Idaho National Laboratory designing custom electronics for nuclear test reactors. John took a one-year break from the Lab in 1985 and worked for Energy Incorporated, where he developed Pro-Spice, a circuit analysis software program for use on PCs. He returned to the Lab in 1986 and remained there until his retirement in 2001. During those years, John focused on innovative ways to use signal processing in measurement control problems.

Teaching Experience: John has been teaching Electrical Engineering courses and advising graduate students for Montana Tech since 2001. He took early retirement from the Idaho National Laboratory (INL) in the early summer of 2001. He has taught Electrical Engineering courses for the U of I branch in Idaho Falls in support of advanced education at the INL since 1980. He served as a visiting professor at Idaho State University for a 3-year appointment, 1997 to 2000. Morrison has taught such EE courses as Communication Systems, Electronics, Electromagnetics, Digital Logic, Signals and Systems, Control Theory and Stochastic Systems. Dr. Morrison received four patents related to his work at and with INL. Dr. Morrison has also had several publications in the last five years, five of which have been refereed.

Patents

U.S. Patent No. 6,462,562 – Differential Capacitance Probe for Process Control Involving Aqueous Dielectric Fluids

U.S. Patent No. 6,320,193 – Method for Non-Intrusively Identifying a Contained Material Utilizing Uncollided Nuclear Transmission Measurements

U.S. Patent No. 6,222,373 – Method and Apparatus for Monitoring the Integrity of a Geomembrane Liner Using Time Domain Reflectometry

U.S. Patent No. 6,147,502 – Method and Apparatus for Measuring Butterfat and Protein Content Using Microwave Absorption Techniques

U.S. Patent No. 5,470,043 – Magnetic Latching Solenoid